

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Work Order ID 149621

Monday, July 25, 2016 2:38:56 PM

149621

Page 2

Item ID: D139-799-212**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Quick Release Maintenance Step, RH**Start Date:** 7/13/2016 **Start Qty:** 1.00 ***1*****Cust Item ID:****Required Date:** 7/25/2016 **Req'd Qty:** 1.00 ***1*****Customer:****Reference:****Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start*****NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop*****NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D139-799-212 Location: <i>fg 019</i>								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

DAS
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OCT 31 2016

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NOV 01 2016

DAS
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9-89

NOV 01 2016

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

Picklist Print

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Page 1

Work Order ID: 149621

149621

Parent Item: D139-799-212

D139-799-212

Parent Item Name: Quick Release Maintenance Step, RH

Start Date: 7/13/2016

Required Date: 7/25/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 15.09.23 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D5238-041 Maintenance Step Assembly	D5238-041	Manufactured	No				Each	0.0000	**	1			
D5238-043 Lower Bracket, Aft		Manufactured	No				Each	0.0000	**	1			
D5238-045 Lower Bracket, Fwd		Manufactured	No				Each	0.0000	**	1			
D5245-1 Mounting Bolt		Manufactured	No				Each	13.0000	**	1			
AN6H12A Bolt		Purchased	No				Each	32.0000	**	1			

Location

Loc Qty

Loc Code

ST160

13

147223

13

Location

Loc Qty

Loc Code

Sr335

4

m132930

4

ST335

28

m133992

3

m134335

25

OCT 27 2016

OCT 27 2016

Add as per ECN 16-657

D5245-7 x 1.

dm

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1 X B152487

OCT 27 2016

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9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 																																																							
Description Work Order Deviation				Disposition																																																											
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								QC / QA Coordinator Approval 																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :	
Misidentified ☐	Past Due ☐																																																														

Picklist Print

Monday, July 25, 2016 2:38:55 PM

Page 2

Work Order ID: 149621

149621

Parent Item: D139-799-212

D139-799-212

Parent Item Name: Quick Release Maintenance Step, RH

Start Date: 7/13/2016

Required Date: 7/25/2016

Start Qty: 1.00

Required Qty: 1.00

AN6H13A Purchased No

Each 47.0000 1

AN6H13A

Bolt

OCT 27 2016

DAS
27
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Location

Loc Qty

Loc Code

ST335

47

m132930

2

m134257

15

m134370

30

Each

696.0000

1x
①
m135464

DAS
27
9-89

DAS
28
9-89

NAS1149D0663J

Purchased

No

NAS1149D0663.J

Washer

Location

Loc Qty

Loc Code

ST260

227

M131618

227

ST263

464

M135135

464

ST269

5

M126334

5

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DAS
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Shop Packet Print

Page 2

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

5.0 PARTS LIST

Qty -011	Qty -012	Qty -017	Qty -019	Qty -112	Qty -211	Qty -212	Qty -213	Part Number	Description
X								D139-799-011	MAINTENANCE STEP KIT, LH
	X							D139-799-012	MAINTENANCE STEP KIT, RH
		X						D139-799-017	CARGO FLOOR PROTECTOR KIT
			X					D139-799-019	CABIN FLOOR PROTECTOR KIT
				X				D139-799-112	MAINTENANCE STEP WITH GRAB BAR KIT, RH
					X			D139-799-211	QUICK RELEASE MAINTENANCE STEP KIT, LH
						X		D139-799-212	QUICK RELEASE MAINTENANCE STEP KIT, RH
							X	D139-799-213	QUICK RELEASE MAINTENANCE STEP PROVISIONS KIT
		2						D3580-1	JOGGLE BRACKET
		2	8					D3628-1	CUPPED WASHER
1								D4092-041	MAINTENANCE STEP ASSEMBLY
	1							D4092-042	MAINTENANCE STEP ASSEMBLY
			1					D4130-1	FWD CABIN FLOOR PROTECTOR
			1					D4130-3	AFT CABIN FLOOR PROTECTOR
		1						D4130-5	FWD CARGO FLOOR PROTECTOR
		1						D4130-7	CENTER CARGO FLOOR PROTECTOR
		1						D4130-9	AFT CARGO FLOOR PROTECTOR
		1						D4153-1	JOGGLE BRACKET
		1						D4153-3	JOGGLE BRACKET
			4					D4153-5	CLAMP PLATE
		2						D4166-1	PLACARD, MAX LOAD
				1				D4526-042	MAINTENANCE STEP ASSEMBLY, RH
					1			D5238-041	MAINTENANCE STEP ASSEMBLY
						1		D5238-042	MAINTENANCE STEP ASSEMBLY
					1	1	1	D5238-043	LOWER BRACKET, AFT
					1	1	1	D5238-045	LOWER BRACKET, FWD
					1	1	1	D5245-1	MOUNTING BOLT
2	2			2	2	2	2	AN6H12A	BOLT
2	2			2	1	1	1	AN6H13A	BOLT
6	6			6	5	5	5	NAS1149D0663J	WASHER (or AN960JD616)

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D139-799 REV. L OR LATER APPROVED REVISION AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D139-799 REV. 11 OR LATER APPROVED REVISIONS

REF. FAA STC: SR02138SE
REF. TCCA LOA: C-11-0841
REF. EASA STC: 10038656
REF. ANAC STC: 2012S02-13
REF. JCAB STC: STC-425-TYO

1.0 PURPOSE

The D5245-1 Mounting Bolt provided with kit P/Ns D139-799-211/-212/-213 at CHG 001 is too short for installation on AB/AW139 model aircraft that are SAR configured or reinforced for installation of a hoist. The purpose of this DART Service Instruction (DSI) is to add a longer bolt (P/N D5245-7) to kit P/Ns D139-799-211/-212/-213 at CHG 002 and later.

Customers who have already purchased kit P/Ns D139-799-211/-212/-213 at CHG 001 can contact DART to obtain the DSI 9761-011 Mounting Bolt Kit.

Qty -011	Part Number	Description
X	DSI 9761-011	MOUNTING BOLT KIT
1	D5245-7	MOUNTING BOLT

2.0 INSTALLATION AND MAINTENANCE

The D5245-7 Mounting Bolt installs on AB/AW139 model aircraft that are SAR configured or reinforced for installation of a hoist only. The D5245-7 Mounting Bolt should be installed and maintained in accordance with the same instructions as the D5245-1 Mounting Bolt as outlined in IIN-D139-799 and ICA-D139-799 respectively.

3.0 WEIGHT AND BALANCE

This change has a negligible effect on weight and balance.

4.0 PARTS LISTS

For D139-799-211/-212 Quick Release Maintenance Step Kits, LH/RH and D139-799-213 Quick Release Maintenance Step Provisions Kit, modify the Parts List of IIN-D139-799 and ICA-D139-799 as follows:

Qty -011	Qty -012	Qty -017	Qty -019	Qty -112	Qty -211	Qty -212	Qty -213	Part Number	Description
X								D139-799-011	MAINTENANCE STEP KIT, LH
	X							D139-799-012	MAINTENANCE STEP KIT, RH
		X						D139-799-017	CARGO FLOOR PROTECTOR KIT
			X					D139-799-019	CABIN FLOOR PROTECTOR KIT
				X				D139-799-112	MAINTENANCE STEP WITH GRAB BAR KIT, RH
					X			D139-799-211	QUICK RELEASE MAINTENANCE STEP KIT, LH
						X		D139-799-212	QUICK RELEASE MAINTENANCE STEP KIT, RH
							X	D139-799-213	QUICK RELEASE MAINTENANCE STEP PROVISIONS KIT
					1	1	1	D5245-7	MOUNTING BOLT (ADD)

APPROVED

A	NEW ISSUE	ML	16.10.20
REV.	DESCRIPTION	BY	DATE
DESIGN	MB	DART AEROSPACE USA, INC.	
DRAWN	ML	EUGENE, OR	
CHECKED	AJS	DRAWING NO.	REV. A
MFG. APPR.	DD	DSI 9761	SHEET 1 OF 1
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	MOUNTING BOLT KIT	NTS
DATE	16.10.20	COPYRIGHT © 2016 BY DART AEROSPACE USA, INC.	
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Work Order ID 149621***149621***

Page 1

Thursday, October 27, 2016 2:53:11 PM

Item ID: D139-799-212

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Quick Release Maintenance Step, RH

Start Date: 7/13/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 7/25/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

DSI9761

A

IIN-D139-799

L

100

Document Control

0.00

100

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D139-799-212

CHG001

CHG002

DAS
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9-89

see attachment

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

OCT 28 2016
DAS
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OCT 28 2016
OCT 28 2016

11

D139-799-211/-212

QUICK RELEASE MAINTENANCE STEP, LH/RH

Author	Year	Country	Sample Size	Study Design	Findings
Smith et al.	2015	USA	1,200	Longitudinal	Increased risk of depression in children of parents with mental illness.
Johnson et al.	2016	UK	800	Cross-sectional	Higher levels of anxiety in children of parents with anxiety disorders.
Lee et al.	2017	Canada	950	Case-control	Association between parental mental illness and child conduct problems.
Wong et al.	2018	Australia	1,100	Longitudinal	Impact of parental mental health on child cognitive development.
Chen et al.	2019	China	1,300	Cross-sectional	Prevalence of mental health issues in children of parents with mental illness.
Miller et al.	2020	USA	1,050	Longitudinal	Resilience factors in children of parents with mental illness.
Patel et al.	2021	India	1,150	Cross-sectional	Mental health outcomes in children of parents with mental illness.
Kim et al.	2022	South Korea	1,250	Longitudinal	Parental mental health and child emotional well-being.
Nguyen et al.	2023	Vietnam	1,350	Cross-sectional	Mental health status of children of parents with mental illness.
Adams et al.	2024	USA	1,400	Longitudinal	Impact of parental mental health on child academic performance.
Thompson et al.	2025	UK	1,450	Cross-sectional	Mental health challenges in children of parents with mental illness.